- 3. The final rejection contends for the first time that the specifics of the three passive electrical components which are tuned to the third harmonic frequency are recited in the appealed claims 2 and 4 (affirmed by the board).
- 4. The final rejection states that applicant's arguments filed 3/30/01 have been fully considered but they are not persuasive, whereas the final rejection should have considered applicant's arguments filed 8/24/01 and the three previously-filed declaration of secondary considerations as probative evidence of non-obviousness.
- 5. The final rejection, for the first time, states that the decision rendered 7/25/00 (pages 3-14) addresses all the arguments reiterated in the "remarked" (sic) filed "8/2/401"(sic).
- 6. The final rejection, for the first time, quotes certain passages from the decision rendered 7/25/00 which deal with different claims and a different record.
- 7. Section 4b of the final rejection refers to an unidentified "declaration under 37 C.F.R. 1.132", but fails to identify if it refers to the Lowenstein Declaration, or the Kraus Declaration, or the Perrone Declaration.
- 8. The final rejection erroneously states that the facts presented in the unidentified declaration "are not germane to the rejection at issue", but does not identify which declaration, which facts, and why such facts are not germane.
- 9. The final rejection erroneously states that it (the unidentified declaration) includes statements which are not relevant to the issue of nonobviousness of the claimed invention and provides no objective evidence thereof, but fails to identify which declaration and which statements.
- 10. The final rejection erroneously states that there is no showing that persons skilled in the art "...knew of the teachings of the above cited references...," which flies in the face of the well-established patent doctrine that the artisan is presumed to know the teachings of the prior art.
- The final rejection contends that the unidentified declaration fails to prove that the commercial success is due to the merits of the claimed invention and not the marketing of the product itself, whereas in contrast all of the three previously-filed declarations and the DeDad Declaration submitted herewith dispute this contention.
- 12. The final rejection, for the first time, contends that the artisan would have found the Stacey reference to be of particular pertinence to the problem at hand.
- 13. The final rejection, for the first time, contends that the reference (unidentified) explicitly discloses that an active element is unnecessary when there is but one harmonic frequency.

- 14. The final rejection, for the first time, contends that harmonic filtering traditionally consisted of passive components, the artisan - when faced with the problem of attenuating a single harmonic frequency - would have found Stacey to be suggestive of using only passive components.
- 15. The final rejection, for the first time, contends that the artisan would have recognized...three identical filters having three passive elements in the configuration of Figure 5 of Stacey one filter for each phase of a three phase system.
- 16. The final rejection, for the first time, contends that claims 22, 26, 29, and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over applicant's admitted prior art (page 1, lines 11-18) in view of Stacey and Thanawala.

Applicant respectively traverses these newly-asserted and specified rejections.

In the Office Action prior to the final rejection, the Examiner asserted that applicant's admitted prior art was the entire patent application of applicant, namely page 1, lines 1 et seq. In contrast, the final rejection, for the first time, asserts that applicant's admitted prior art is only page 1, lines 11-18.

Specification page 1, lines 11-18, states:

"In electrical power systems, harmonic currents are often created due to the presence of nonlinear loads located therein. In some instances, significant levels of third order harmonic currents are created in electrical power systems having single phase nonlinear loads, which may often approach the level of the fundamental frequency current. Such third order harmonic currents adversely effect (sic) the performance of power systems by causing the peak voltage of the power lines to flatten, thus disrupting the operation of nonlinear loads, such as single-phase switching power supplies and corresponding devices connected thereto."

The Examiner concedes that Stacey and Thanawala, standing alone, would not make applicant's claims unpatentable. In addition, there is no motivation to combine Stacey and Thanawala. Indeed, even if there was some motivation to combine Stacey and Thanawala, such combination, standing alone, would not result in the invention as specified in the rejected claims.

Moreover, such combination of Stacey and Thanawala reaches away from the claimed invention, as explained more fully hereinbelow.

Notwithstanding the foregoing, in the Office Action prior to the final rejection, the Examiner asserts that "the examiner provided the motivations for combining the references".

In view of that fact that the final rejection fails to assert any motivation for combining the references, a prime facie case of obviousness has not been made.

The burden of establishing obviousness rests upon the Examiner espousing such. Stratoflex Inc. v Aeroquip Corp., 713 F. 2d at 1534, 218 USPQ at 875. Where the Examiner asserting obviousness must rely upon a combination of prior art references to establish obviousness, the Examiner bears the burden of showing some teaching or suggestion in these references which support their use in combination. W.L. Gore & Assocs., Inc v. Garlock, Inc., 721 F. 2d at 1552, 220 USPQ at 312. It is legal error to place this burden on the applicant.

The genius of invention is often a combination of known elements which in hindsight seems preordained. To prevent hindsight invalidation of patent claims, the law requires some "teaching, suggestion or reason" to combine cited references. Gambro Lundia AB v. Baxter Healthcare Corp, 110 F.3d, 1573, 1579, 42 USPQ2d 1378, 1383 (Fed. Cir. 1997).

The opportunity to judge by hindsight is particularly tempting. Consequently, the tests of whether to combine references need to be applied rigorously. In re Dembiczak, 175 F. 3d, 994, 999, 50 USPQ2d 1614, 1617 (Fed. Cir. 1999); In re Gartside, 203 F.3d, 1305, 53 USPQ 2d 1769 (2000) (guarding against falling victim to the insidious effect of a hindsight syndrome wherein that which only the inventor taught is used against its teacher).

Whether a motivation to combine prior art references has been demonstrated is a question of fact. Winner International Royalty Corp. v. Wang, 202 F.3d 1340, 1348, 53 USPQ2d 1580, 1586 (Fed. Cir. 2000).

It is impermissible for the Examiner to first ascertain factually what applicant <u>did</u> and then view the prior art in such a manner as to select from the random facts of that art only those which may be modified and then utilized to reconstruct applicant's invention from such prior art. In re Shuman, 361 F.2d 1008, 1012, 150 USPQ 54, 57 (CCPA 1966).

The test to be applied is whether the claimed invention would have been obvious to one skilled in the art when the invention was made, not to an Examiner after learning all about the invention. Stratoflex, Inc. v. Areoquip Corp., 713 F.2d, 1530, 1538, 218 USPQ 871, 879 (Fed. Cir. 1983).

Inventions must be held to be nonobvious where neither any reference, considered in its entirety, nor the prior art as a whole, suggested the combination claimed. Fromson v. Advance Offset Plate, Inc., 755 F.2d 1549, 1556, 225 USPQ 26, 31 (Fed. Cir. 1985); ACS Hospital Systems, Inc. v. Montefiore Hospital, 732 F.2d 1572, 1577, 221 USPQ 929, 932-33 (Fed. Cir. 1984).

Nowhere does the final rejection indicate where in the prior art there might be a suggestion of combining teachings of the individual references, or how, if there was such a suggestion, such combination would equal any of those claimed by applicant.

The teaching or suggestion to make the claimed combination <u>and</u> the reasonable expectation of success <u>must both</u> be found in the prior art <u>and not</u> based on applicant's disclosure. In re Vaeck, 947 F.2d 488, 20 USPQ2d 1438.

The final rejection is in error: in considering the claims in less than their entireties; in considering the references in less than their entireties; and in disregarding disclosures in the references that diverge from and teach away from the invention at hand. W.L. Gore & Assocs., Inc. v. Garlock, Inc., 721 Fed 2d at 1550, 1552, 221 USPQ at 311.

The 1974 Stacey reference teaches away from the applicant's invention.

Applicant's rejected claims require, amongst other things, a completely-passive parallel resonant circuit having three passive electrical branches connected in parallel, and one or more nonlinear loads. In contrast, the 1974 Stacey reference and the 1975 Thanawala reference, taken singly or in combination, teach away from applicant's claimed invention.

In particular, Stacey states at column 1, lines 13-26, that: "In the past, most filters of this type employed only passive components (e.g., inductors and capacitors).... Unfortunately, however, in high power, low frequency applications, the value, size and rating of the shunt capacitor as well as the extra KVAR demand on the alternating current source becomes excessively high to warrant any practical use of this arrangement."

Furthermore, Stacey also states at column 2, lines 16-19, that: "In accordance with the present invention, the hybrid filter arrangement for high power applications is provided which employs both active and passive elements while at the same time overcoming the main disadvantages of each when used separately."

Thus, it is clear that Stacey teaches away from using only passive elements.

Moreover, the final rejection, for the first time, asserts that "the reference explicitly discloses that an active element is unnecessary when there is but one harmonic frequency." This assertion is false. Nowhere does Stacey explicitly disclose that an active element is unnecessary when there is but one harmonic frequency.

In contrast, Stacey states, at column 7, lines 5-10, that: "Of course, if the elements 60 and 62 are <u>exactly</u> tuned to the ripple frequency, and <u>assuming</u> that only one ripple frequency exists, then <u>if</u> the internal resistance of the passive elements is zero, the active element 28' <u>will not come into play</u> as is the case with the circuits previously described." (Emphasis added).

This statement by Stacey is not a disclosure that an active element is not necessary when there is but one harmonic frequency.

In addition, the artisan would know that this statement by Stacey assumes things which are not scientifically correct and do not reflect the real world. First, the assumption that only one ripple frequency exists is false because more than one ripple frequency always exists.

Secondly, the assumption that the internal resistance of the passive elements is zero is also scientifically incorrect, because the internal resistance of the passive elements is never zero.

Furthermore, even if the Stacey assumptions were correct, which they are not, the assertion by Stacey that the active element 28' will not come into play is not a teaching or suggestion to remove the active element 28' and substitute therefor a passive resistor. Furthermore, Stacey discloses a linear load (Stacey column 3, line 37), and not one or more non-linear loads as required by applicant's rejected claims.

The final rejection is completely silent as to what Thanawala allegedly contributes to the nonobviousness rejection.

The final rejection asserts, for the first time, the ground of res judicata. Applicant respectfully traverse the res judicata rejection for the reasons set forth hereinbelow.

The final rejection fails to make any showing of an identity of the issues presented for adjudication and the issues previously decided. Res judicata requires a showing of an identity of the issues presented for adjudication and issues previously decided. In re Hellbaum, 54 CCPA 1051, 371 F.2d 1022, 152 USPQ 572 (1967); In re Fried, 50 CCPA 954, 312 F.2d 930, 136 USPQ 429 (1963). Here there is no such identity of such issues, and in addition, the final rejection fails to make any showing of any alleged identity of such issues.

The claims considered by the Board of Appeals are not identical to the claims rejected by the present final rejection.

Furthermore, there is no identity between the record before the Board of Appeals and the record herein. There is also <u>no</u> identity between the evidence as a whole before the Board of Appeals, and the evidence as a whole herein, including the evidence of secondary considerations going to the issue of obviousness/nonobviousness. Such evidence of secondary considerations going to the issue of obviousness/nonobviousness <u>must</u> be considered prior to reaching a conclusion of obviousness/nonobviousness, and such evidence was not before the Board of Appeals. In re Herr, 377 F2d 610, 153 USPQ 548 (CCPA 1967); In re Russell, 169 USPQ 426 (CCPA 1971); Fromson, 755 Fed 2d at 1556-57, 225 USPQ 32; W.L. Gore, 721 F.2d at 1555, 220 USPQ 314.

In addition, even if the final rejection made a showing of identity of the issues presented for adjudication and the issues previously decided which are required by a rejection of res judicata (which the final rejection makes no such showing), the rejection on the ground of res judicata had been waived by the Examiner. If res judicata was applicable, the Examiner should have made such rejection in the first office action, and indeed should have made such first office action on the ground of res judicata as a final rejection, which the Examiner did not. Thus, for this reason alone, the belated rejection on the ground of res judicata has been waived. In re Kaghan, 387 F.2d 398, 156 USPQ 130 (CCPA 1967).

The final rejection at item 4a(iv) states an incomplete quotation from the appeals decision. The complete quotation of the appeal decision (page 8, lines 1-5) states: "We find upon consideration of the evidence of a whole that the artisan would have recognized, as a suggested solution to the stated problems, three identical filters having three passive elements in the configuration of Figure 5 of Stacey - - one filter for each phase of a three phase system." Emphasis

has been added to underscore the portion omitted in the final rejection. Again, it is important to note that the evidence as a whole before the board was not the evidence as a whole for the final rejection herein.

Item 4b of the final rejection refers to "the declaration" without identifying to which of the three previously-filed declarations the Examiner refers. Thus, applicant does not know, and the Board of Appeals (if necessary) would not know, to which declaration the final rejection refers.

The final rejection asserts that the unidentified declaration presents facts which are not germane to the rejection at issue, but fails to identify such facts, and why such unidentified facts are not germane to the rejection at issue. It is important to note that all of the declarations specifically recite or identify the claims at issue.

Item 4b(ii) of the final rejection alleges that the unidentified declaration includes statements which amount to an affirmation that the claimed subject matter functions as it was intended to function. However, the final rejection does not identify which declaration, nor to which statements the final rejection refers.

Item 4b(iii) of the final rejection contends that the unidentified declaration states: "that the claimed subject matter solved a problem that was long standing in the art. However, there is no showing that others of ordinary skill in the art were working on the problem and, if so, for how long. In addition, there is no showing that persons skilled in the art who were presumably working on the problem knew of the teachings of the above cited references and still were unable to solve the problem."

First, the law presumes that artisans knew of the teachings of the cited references. "The issue of obviousness is determined entirely with reference to a <u>hypothetical</u> 'person having ordinary skill in the art.' It is only that hypothetical person who is presumed to be aware of all of the pertinent prior art." The Standard Oil Company v. American Cyanamid Company, 227 USPQ 293, 297 (CAFC 1985).

Secondly, the three previously-filed declarations explicitly or implicitly deal with all of the matters mentioned in item 4b(iii) of the final rejection. Moreover, in view of the reasons stated hereinabove as to why present Response under 37 CFR 1.116 with its attached Declaration of John A. DeDad should be entered and considered, it is respectfully requested that the Examiner consider the Declaration of John A DeDad together with the material attached thereto which also specifically deals with the items complained of in item 4b(iii) of the final rejection.

Finally, there is no authority for the proposition that all of the items mentioned in item 4b(iii) of the final rejection be set out within the four corners of a single declaration, nor that all of such secondary considerations be stated within the four corners of a single declaration setting forth evidence of secondary considerations.

Item 4b(iv) of the final rejection alleges that the unidentified declaration fails to prove that the commercial success is due to the merits of the claimed invention and not the marketing of the

product itself. Again, applicant does not know, and the Board of Appeals (if necessary), would not know to which declaration the final rejection here refers.

Notwithstanding the foregoing, in contrast, the Lowenstein Declaration states:

- "11. The commercial success or sales success of the Harmonics Limited products embodying the INVENTION is not due to price concessions. The products are sold at a higher initial cost than products incorporating competing technology.
- "12. The commercial success or sales success of the Harmonics Limited products embodying the INVENTION is not due to purchases by representatives and distributors. Harmonics Limited products embodying the INVENTION are sold directly to customers, not through distributors or representatives.
- "13. The commercial success or sales of Harmonics Limited products embodying the INVENTION is not due to a large advertising campaign. The first national advertising campaign for the INVENTION was launched in June, 2000. Before that date, advertising was by word of mouth and direct customer contact by sales representatives. The national advertising expenditure in the year 2000 relating to Harmonics Limited products embodying the INVENTION was \$60,000.
- "14. Based on my many years of experience in the industry, the sales of Harmonics Limited products embodying the INVENTION far exceed that which would normally be expected in the relevant marketplace for a new product. For example, in 1996 a major company introduced a competing product that used different technology. The competing product cost over \$24 million to develop and was heavily advertised. In two years, sales consisted of less than \$50,000. The competing product was withdrawn from the marketplace."

In further contrast, the Kraus Declaration states:

- "9. DSA's sales of Harmonics Limited products utilizing the INVENTION are not the result of extensive advertising. In fact, the INVENTION is not the kind of product that can be sold by advertising hyperbole, and Harmonics Limited has conducted minimal advertising in connection with this technology. Rather, the purchasers of this technology are sophisticated electrical and maintenance engineers who based purchasing decisions on functionality and performance....
- "10. Harmonics Limited's products utilizing the INVENTION are more expensive than competing technologies; therefore the commercial success, and our customers' reason for purchasing this technology, is not due to aggressive pricing or discounts. Once we explain to engineers how the INVENTION works, they clearly realize that the extra cost of equipment from Harmonics Limited utilizing the INVENTION is offset by superior operation and benefits.
- "11. The commercial success of equipment from Harmonics Limited utilizing the INVENTION is attributable to the unique way it operates, the prevention of harmonic current flow rather than removal of harmonic currents after they are formed in the system."

In further contrast, the Perrone Declaration states:

- "9. Chase Bank's purchases of Harmonics Limited products utilizing the INVENTION are not the result of extensive advertising. In fact, the INVENTION is not the type of product that can be sold by advertising hyperbole, and Harmonics Limited has conducted minimal advertising in connection with this technology. Rather, the purchasers of this technology are sophisticated electrical and maintenance engineers who base purchasing decisions on functionality and performance....
- "10. Harmonics Limited's products that use the INVENTION are more expensive than competing technologies; therefore the commercial success, and Chase's reason for purchasing this technology, is not due to aggressive pricing or discounts.
- "11. The commercial success of equipment from Harmonics Limited utilizing the INVENTION is attributable to the unique way it operates, the prevention of harmonic current flow rather than removal of harmonic currents after they are formed in the system."

In further contrast, the DeDad Declaration submitted herewith states:

- "5. Harmonics Limited has advertised only twice in EC&M Magazine, in the September and October 2000 issues. Prior and subsequent to these issues, Harmonics Limited has had no major advertising in any Primedia magazine.
- "6. The commercial success of the INVENTION is based on the advantage of its technology, which eliminates the need to replace existing branch circuit wiring or increase neutral conductors, and redistribute existing loads on existing delta-wye transformers. The initial cost of the above coping methods is saved through the application of the INVENTION. Other technologies involve the use of tuned filters in harmonics mitigating systems that are application unique, depending on the harmonics present and their magnitude."

It is respectfully submitted that the objections to the unidentified declaration raised in item 4b of the final rejection amount to mere argument and conjecture which are insufficient. Where the marketed product embodies the claimed features and is coextensive with them, then a nexus is presumed and the burden shifts to the Examiner asserting obviousness to present evidence to rebut the presumed nexus. J.T. Eaton & Co. v. Atlantic Paste & Glue Co., 106 F.3d 1563, 1571, 41 USPQ2d, 1641, 1647; Demaco Corp. v. F. Von Langsdorff Licensing Ltd., 851 F.2d 1387, 1392-93,

7 USPQ2d 1222, 1226. The final rejection presents no evidence to rebut the presumed nexus.

The presumed nexus cannot be rebutted with mere argument; evidence must be put forward. Demaco, 851 F.2d at 1393, 7 USPQ2d at 1226-27 ("It is thus the task of the challenger to adduce evidence.... Argument and conjecture are insufficient."). In the present case, the nexus in the commercial success of the invention is due to the merits of the claimed invention.

In addition to the secondary consideration of commercial success, industry acceptance is also evidence of nonobviousness. Diversitech Corp. v. Century Steps, Inc., 850 F.2d 675, 679, 7 USPQ2d 1315, 1319 (Fed. Cir. 1988). The three declarations already on file, as well as the DeDad Declaration submitted herewith, show clear evidence of industry acceptance of the invention.

In light of the foregoing, applicant respectfully requests that the Examiner reconsider the obviousness rejection with a view toward withdrawing same.

It is respectfully submitted that the application is now in condition for allowance, and a notice to this effect is earnestly solicited.

In the event that the Examiner is not yet convinced that the application is in condition for allowance, it is respectfully requested that the Examiner telephone the undersigned attorney for applicant in an effort to facilitate the prosecution and/or to narrow the issues for appeal (if necessary).

Applicant encloses herewith a Petition for Extension of Time under 37 CFR 1.136(a) with required extension fee.

Favorable consideration is respectfully requested.

Respectfully submitted,

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Attorney for Applicant

989 724-7400

Date: January 9, 2002 Weiner & Burt, P.C. 635 N. US-23 POB 186 Harrisville, MI 48740

## Certificate of Mailing

I hereby certify that the foregoing Response with its mentioned attachments were sent to Box AF, Commissioner for Patents, Washington, D.C. 20231 on January 9, 2002 by first class mail.

Irving M. Weiner